# **TOWNSHIP BULLETIN**

### AND UNIFORM COMPLIANCE GUIDELINES ISSUED BY STATE BOARD OF ACCOUNTS

Volume No. 260, Page 1 February 2003

#### ITEMS TO REMEMBER

#### **MARCH**

- March 1: Assessing period begins, (IC 6-1.1-1-2) for all tangible property except mobile homes as defined in IC 6-1.1-7-1.
- March 3: (First Monday in March) Make report of the Dog Fund to the County Auditor and pay to the County Treasurer any funds in a Township Dog Fund designated (by the county) for a Humane Society under IC 15-5-9-8; and/or any amount in a Township Dog Fund exceeding \$300 over and above orders drawn on the fund, and must show all receipts into the Township Dog Fund and all orders drawn in order. (IC 15-5-9-10) Also give County Auditor the number or receipts issued if a humane society has been designated. (IC 15-5-9-8)
- March 10: (Second Monday in March) County Auditor makes distribution of County Dog Fund to the townships of the county in which the orders drawn against the Dog Fund exceeded the money on hand as shown on the report filed on March 3 (or by the county to a humane society if an ordinance is passed). Any money received from the County Dog Fund must be receipted to Township Dog Fund. (IC 15-5-9-10)
- March All local investment officers shall reconcile at least monthly the balance of public funds, as disclosed by the records of the local officers, with the balance statements provided by the respective depositories.

#### **APRIL**

- April 15: Last day to make pension report and payment for first quarter by townships participating in PERF.
- April 18: Good Friday Legal Holiday (IC 1-1-9-1)
- April 30: Last day to file quarterly report, Form 941, to the Internal Revenue Service for federal and social security taxes for the first quarter.
- April 30: Last day to make report for first quarter to the Department of Workforce Development.
- April All local investment officers shall reconcile at least monthly the balance of public funds, as disclosed by the records of the local officers, with the balance statements provided by the respective depositories.

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#### MAY

- May 1: On or before this date report to county auditor, in writing, the amount of unpaid claims against the Dog Fund which have not been paid because of lack of funds. (IC 15-5-9-11)
- May 15: Date for completion of assessing. (IC 6-1.1-1-7)
- May 26: Memorial Day Legal Holiday (IC 1-1-9-1)
- May 31: On or before June 1 and December 1 of each year (or more frequently if the county legislative body adopts an ordinance requiring additional certifications) the township shall certify a list of the names and addresses of each person who has money due from the township to the county treasurer. (IC 6-1.1-22-14).
- May : All local investment officers shall reconcile at least monthly the balance of public funds, as disclosed by the records of the local officers, with the balance statements provided by the respective depositories.

#### TOWNSHIP TRUSTEES' MEETING

The State Board of Accounts Meeting for Township Trustees, November 20, 2002, and the training for newly elected trustees on November 21, 2002, Indianapolis, were a success as indicated by compliments received concerning the meetings and the large turnout of several hundred township representatives. We would like to thank the Indiana Township Association for the cooperation in our having the November 20th meeting in conjunction with the Township Convention as has been the custom for many years.

Trustees not attending the 2002 meeting are encouraged and <u>specifically requested</u> to attend a similar meeting we plan on calling in 2003. A wide range of topics were discussed both during and between sessions which pertain to your audits by the State Board of Accounts.

Your ideas and suggestions for additional areas you would like addressed at the 2003 meeting are always welcome. We anticipate seeing all Township Trustees at our meeting in 2003.

#### **SOCIAL SECURITY WITHHOLDINGS - 2003**

We understand that for 2003 the maximum amount of taxable and creditable annual earnings subject to Social Security will increase to \$87,000 up from \$84,900 in 2002. No maximum base for Medicare will exist. Rates will remain at the 2002 level at a combined rate of 7.65 percent (both employer and employee for a total of 15.3 percent) representing a 6.20 percent rate for Social Security and 1.45 percent for Medicare.

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#### **PUBLIC RECORDS**

IC 5-14-3-1 provides "A fundamental philosophy of the American constitutional form of representative government is that government is the servant of the people and not their master. Accordingly, it is the public policy of the state that all persons are entitled to full and complete information regarding the affairs of government and the official acts of those who represent them as public officials and employees. Providing persons with the information is an essential function of a representative government and an integral part of the routine duties of public officials and employees, whose duty it is to provide the information. This chapter shall be liberally construed to implement this policy and place the burden of proof for the nondisclosure of a public record on the public agency that would deny access to the record and not on the person seeking to inspect and copy the record."

Most records of public offices are public property and may be examined by any citizen of the township, unless the law specifically provides the records are confidential. Any person may inspect and copy the public records of any public agency. Such request for inspection or copying must identify with reasonable particularity the record being requested and at the discretion of the township in accordance with IC 5-14-3-3, be in writing on or in a form provided by the township.

No request may be denied because the person making the request refuses to state the purpose of the request, unless such condition is required by statute. (IC 5-14-3-3)

A public agency may not deny or interfere with a person's right to inspect or copy public records. The public agency shall either provide the requested copies to the person requesting such copies or allow the person to make copies on the agency's equipment.

The public agency may charge a fee for such copies, not to exceed the actual cost of copying the records and in accordance with IC 5-14-3-8.

IC 5-14-3-4 contains an extensive listing of those records which are (or could) be held to be confidential. All township officials are urged to review the law to ensure the township's policy on such records is in compliance with the statute. The township attorney should be consulted in various situations regarding questions concerning poor relief records.

A township determining to deny access to a public record to a person for any reason should refer to the provisions of IC 5-14-3-9. A person who has been denied the right to inspect or copy a public record may file an action in circuit or superior court to compel the township to permit the individual to inspect and copy the public record.

Please contact Anne Mullin O'Connor, Public Access Counselor, at 1-800-228-6013 if questions arise concerning access to public records or meetings.

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#### INTERNAL CONTROL SUGGESTIONS

Requests have been received that an article containing some suggestions or recommendations for improving internal control procedures in the operation of a township be included in the "Township Bulletin".

We encounter two entirely different sets of circumstances which affect internal control. Multi-person offices provide an opportunity to segregate or divide duties in such a manner as to provide greater internal control. Internal control becomes more difficult to implement for small offices, particularly where one person has many duties or is the only employee in the township office.

Internal control in relation to cash receipts should have the various functions segregated such that the person that receives the cash and prepares the official receipt is not the one who enters the receipt on the records and deposits the cash in the public depository or calculates the record balance and prepares the bank reconcilement. The functions should be handled by as many different persons as feasible. Comparisons provide good control and provide for the discovery of errors or irregularities by the township employees in the normal course of their duties. Cash receipts must be written on serially prenumbered receipt forms (with a duplicate) at the time of receipt; the cash should be counted and totaled at least daily, compared to and balanced with the total shown on the cash register tape, if used, or an adding machine tape of all receipts written. The deposit should agree with the total received during the period for which the deposit is made and payment type and amount should be clearly denoted (cash, check, money order, etc.). Post to the Financial and Appropriation Ledger and compare the total posted with the total received. Cash must be deposited no later than the 1<sup>st</sup> and 15<sup>th</sup> day of each month and should never be used to cash personal checks. Persons receiving or handling money must be properly bonded and the bond recorded with the County Recorder.

Good control in relation to cash disbursements requires the segregation of purchasing from the certification of the receipt of goods and services as well as the writing of checks and the posting of those checks to the records. The more these functions can be handled by separate persons, the better the control. Also, uncompleted check forms should not be accessible to persons other than those authorized to prepare or supervise the check writing process. All blank check forms must be serially numbered in multiple copies or be electronically listed in serial number sequence on an approved check register format. Check forms should never be signed and signatures should never be applied in advance of preparation of the check. Voided or damaged check forms should be rendered non-negotiable and filed for subsequent inspection and audit. Checks should be mailed without allowing them to be returned to the persons who approved the transaction for payment.

Similar controls should be applied to other functions such as petty cash handling, payrolls (preparation and distribution), accounts receivable and payable, investments and investment income, inventories or materials, supplies, property and equipment, bonds payable, prenumbering of other processing programs and procedures. All of these areas should be controlled very carefully and the most acceptable method is through the separation of duties among personnel.

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#### **GHOST EMPLOYMENT**

The Offenses Against Public Administration Act as found in the Indiana Code at Title 35, Article 44 contains a section on ghost employment in Chapter 2. Section (4) states "(a) A public servant who knowingly or intentionally: (1) hires an employee for the governmental entity that he serves; and (2) fails to assign to the employee any duties, or assigns to the employee any duties not related to the operation of the governmental entity; commits ghost employment, a Class D felony. (b) A public servant who knowingly or intentionally assigns to an employee under his supervision any duties not related to the operation of the governmental entity that he serves commits ghost employment, a Class D felony. (c) A person employed by a governmental entity who, knowing that he has not been assigned any duties to perform for the entity, accepts property from the entity commits ghost employment, a Class D felony. (d) A person employed by a governmental entity who knowingly or intentionally accepts property from the entity for the performance of duties not related to the operation of the entity commits ghost employment, a Class D felony. (e) Any person who accepts property from a governmental entity in violation of this section and any public servant who permits the payment of property in violation of this section are jointly and severally liable to the governmental entity for that property. The attorney general may bring a civil action to recover that property in the county where the governmental entity is located or the person or public servant resides. (f) For the purposes of this section, an employee of a governmental entity who voluntarily performs services: (1) that do not: (A) promote religion; (B) attempt to influence legislation or governmental policy; or (C) attempt to influence elections to public office; (2) for the benefit of: (A) another governmental entity; or (B) an organization that is exempt from federal income taxation under Section 501(c)(3) of the Internal Revenue Code; (3) with the approval of the employee's supervisor; and (4) in compliance with a policy or regulation that: (A) is in writing; (B) is issued by the executive officer of the governmental entity; and (C) contains a limitation on the total time during any calendar year that the employee may spend performing the services during normal hours of employment; is considered to be performing duties related to the operation of the governmental entity."

The State Board of Accounts recommends that all townships, as governmental entities, carefully maintain accurate prescribed or approved employment, service and other records for all persons employed so that documentation is available to substantiate all duties assigned and all amounts paid to each.

#### ANNUAL REPORT

The State Board of Accounts is of the audit position the annual report (Township Form 15, Revised 2002) is to be prepared in time to be submitted to a township board by January 21, 2003. The trustee in office on December 31, 2002, has a duty to prepare and sign the report. The township board in office on January 21st is required to examine and approve the report in whole or in part. The trustee in office at December 31, 2002, is required to attend the meeting of the township board to answer any inquiry pertaining to the report or to the business of the township conducted in the preceding year. A sufficient number of copies should be made for distribution to (1) chairman of the township board, (2) county auditor, (3) a file copy for the office of the township trustee, (4) the State Board of Accounts. Within 10 days after action on the report, the new trustee is required to file a copy of the report with accompanying vouchers, in the office of the county auditor. The outgoing trustee will also prepare one copy of the report (Township Form 15, Revised 2002) for each newspaper in which the report is to be published in compliance with IC 36-6-4-13. (Last date February 18) The trustee in office is to cause the publications to be made. One copy is to be filed with the State Board of Accounts no later than January 30, 2003.

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#### **GUARANTEED ENERGY SAVINGS CONTRACTS**

Public Law 98, House Enrolled Act 1158, effective March 21, 2002 provided numerous changes applicable to "Energy Savings Contracts" including the following items.

IC 36-1-12.5-0.5 states "As used in this chapter, 'actual savings' includes stipulated savings."

IC 36-1-12.5-0.7 states "As used in this chapter, 'causally connected work' means work that is required to properly implement an energy conservation measure."

IC 36-1-12.5-1 states in part: "As used in this chapter, 'energy conservation measure' means a school facility alteration or an alteration of a structure (as defined in IC 36-1-10-2) designed to reduce energy consumption costs or other operating costs ... including future:

- (A) labor costs;
- (B) costs for contracted services; and
- (C) related capital expenditures."

IC 36-1-12.5-2.5 provides "... industry engineering standards" includes the following: (1) Lifecycle costing. (2) The R.S. Means estimating method developed by the R.S Means Company. (3) Historical data. (4) Manufacturer's data. (5) American Standard Heating Refrigeration Air Conditioning Engineers (ASHRAE) standards

IC 36-1-12.5-3.5 provides "As used in this chapter, 'related capital expenditures' includes capital costs that: (1) the governing body reasonably believes will be incurred during the contract term; (2) are part of or are causally connected to the energy conservation measures being implemented; and (3) are documented by industry engineering standards."

IC 36-1-12.5-3.7 provides "As used in this chapter 'stipulated savings' are assumed savings that are documented by industry engineering standards."

IC 36-1-12.5-11 states in part (a) "A guaranteed energy savings contract that includes stipulated savings must specify the methodology used to calculate the savings using industry engineering standards."

#### Non "Causally connected work"

Effective March 21, 2002 IC 36-1-12.5-12 states in part (a) "An improvement that is not causally connected to an energy conservation measure may be included in a guaranteed energy savings contract if: (1) the total value of the improvement does not exceed fifteen percent (15%) of the total value of the guaranteed energy savings contract; and (2) either: (A) the improvement is necessary to conform to a law, a rule, or an ordinance; or (B) an analysis within the guaranteed energy savings contract demonstrates that: (i) there is an economic advantage to the political subdivision in implementing an improvement as part of the guaranteed energy savings contract; and (ii) the savings justification for the improvement is documented by industry engineering standards. (b) The information required under subsection (a) must be reported to the department of commerce."

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#### Late Reports

IC 36-1-12.5-10 states "The governing body shall:

- (1) provide to the department of commerce not more than sixty (60) days after the date of execution of the guaranteed energy savings contract:
  - (A) a copy of the executed guaranteed energy savings contract;
  - (B) the energy consumption costs before the date of execution of the guaranteed energy savings contract; and
    - (C) the documentation using industry engineering standards for:
      - (i) stipulated savings; and
      - (ii) related capital expenditures; and
  - (2) annually report to the department of commerce, in accordance with procedures established by the department of commerce, the savings resulting in the previous year from the guaranteed energy savings contract or utility energy efficiency program."

Please ensure that your "Energy Savings Contract" does not put your township into a situation which would result in an Audit Result and Comment because the township has not provided information which would indicate that a contract (existing and new contracts) complies with IC 36-1-12.5 and Public Law 98, House Enrolled Act 1158, effective March 21, 2002. Examples would include "stipulated savings" that are not documented by "industry engineering standards", items which were "causally connected work" but not documented by "industry engineering standards" in accordance with IC 36-1-12.5-11, or if an improvement that is not "causally connected" to an energy conservation measure is greater than fifteen percent (15%) of the total value of the guaranteed energy savings contract or reporting to the Indiana Department of Commerce, Energy Policy Division is not in compliance with IC 36-1-12.5-10.

Information presented for audit in many instances indicates "agreed upon" or "stipulated savings" have been predetermined. Often no information is available to document actual operating or energy savings. Accordingly, with due regards for the remaining contract time for which information may be presented to document actual operating and energy savings (effective March 21, 2002 "stipulated savings" documented by "industry engineering standards"), a township should request reimbursement for costs which did not result in an actual reduction of energy consumption costs or other operating costs (or effective March 21, 2002, stipulated savings which were not supported by "industry engineering standards") at the end of the contract term in accordance with IC 36-1-12.5-11 and IC 36-1-12.5-12.

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#### **RATES for LEGAL ADVERTISING**

Effective January 1, 2003

The following rates, effective January 1, 2002, were computed based upon the statutorily authorized 5% maximum increase allowed by P.L. 64-1995. Any percentage increase other than the 5% will require a separate computation by the State Board of Accounts. Any publisher that has not chosen to increase rates at all will continue to use the rate schedule that was effective January 1, 1988.

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10	0.165	0.246	0.328	0.410	0.174	0.260	0.347	0.433	0.18	4 0.27	0.36	7 0.459	0.18	38	0.281	0.375	0.468			
12	0.137	0.205	0.274	0.342	0.145	0.217	0.289	0.361	0.15	3 0.229	0.30	6 0.382	0.1	57	0.234	0.313	0.390			
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9	0.214	0.320	0.427	0.534	0.217	0.324	0.432	0.540	0.22				0.22		0.332	0.443	0.553			
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Size – 5.5 6 6.5 7 7.5	Nur 1 0.368 0.337 0.311 0.289 0.270	0.549 0.504 0.465 0.432 0.403	0.733 0.672 0.620 0.576 0.538	0.916 0.839 0.775 0.719 0.671	Nur 1 0.374 0.343 0.317 0.294 0.274	0.559 0.512 0.473 0.439 0.410	0.746 0.684 0.631 0.586 0.547	0.932 0.854 0.788 0.732 0.683	0.37 0.34 0.31 0.29 0.27	umber o 2 3 0.562 5 0.513 8 0.476 6 0.442 6 0.412 9 0.386 0 0.344	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573	0.34 0.34 0.33 0.29 0.2	31 49 22 99 79 62 33	0.569 0.521 0.481 0.447 0.417	0.759 0.696 0.642 0.596 0.556	0.948 0.869 0.802 0.745 0.695			
Size – 5.5 6 6.5 7 7.5 8	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225	0.549 0.504 0.465 0.432 0.403 0.378 0.336	0.733 0.672 0.620 0.576 0.538 0.504 0.448	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229	0.559 0.512 0.473 0.439 0.410 0.384 0.342	0.746 0.684 0.631 0.586 0.547 0.513 0.456	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569	1 0.37 0.34 0.31 0.29 0.27 0.25 0.23	umber o 2 3 0.562 5 0.515 8 0.476 6 0.442 6 0.412 9 0.386 0 0.344 7 0.309	1 Sertic 3 S	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573 3 0.515	1 0.34 0.35 0.35 0.22 0.22 0.22	Nun 31 49 22 99 79 62 33	0.569 0.521 0.481 0.447 0.417 0.391 0.347	0.759 0.696 0.642 0.596 0.556 0.522 0.464	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579			
Size – 5.5 6 6.5 7 7.5 8 9	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512	1 0.37 0.34 0.31 0.29 0.27 0.25 0.23	umber o 2 6 0.565 5 0.511 8 0.476 6 0.441 6 0.411 9 0.386 0 0.344 7 0.309 2 0.256	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429	1 0.34 0.35 0.32 0.22 0.22 0.22 0.22	Nun 31 49 22 99 79 62 33 09 74	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521			
Size _ 5.5 6 6.5 7 7.5 8 9 10	Num 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427	0.37 0.34 0.31 0.29 0.27 0.25 0.23 0.20 0.17	umber o 2 3 0.566 5 0.518 8 0.477 6 0.441 9 0.386 0 0.344 7 0.309 2 0.256 0 7.32	f Insertia 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429	0.31 0.33 0.33 0.22 0.22 0.22 0.22 0.21	Nun 31 49 22 99 79 33 09 74	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434			
Size 5.5 6 6.5 7 7.5 8 9 10 12 Rate/Square	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20	1 0.37 0.34 0.31 0.29 0.27 0.25 0.23 0.20 0.17 4.9	wmber o 2 3 0.565 5 0.511 8 0.476 6 0.442 6 0.412 9 0.386 0 0.344 7 0.309 2 0.256 0 7.33	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20	0.33 0.34 0.33 0.29 0.22 0.22 0.21 0.11 4.9	Nun 31 49 22 99 79 62 33 09 74	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20			
Size 5.5 6 6.5 7 7.5 8 9 10 12 Rate/Square	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90 9	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20	1 0.37 0.34 0.31 0.29 0.27 0.25 0.23 0.20 0.17 4.9	wmber o  2  3  0.563  5  0.513  8  0.447  6  0.441  9  0.386  0  0.344  7  0.309  2  0.256  0  7.33  Em C	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7  olumn f Insertic	4 0 0.937 8 0.859 5 0.793 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20	0.33 0.34 0.33 0.29 0.22 0.22 0.21 0.11 4.5	Nun 31 49 22 99 79 62 33 09 74	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20			
5.5 6 6.5 7 7.5 8 9 10 12 Rate/Square	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20	1 0.37 0.34 0.31 0.29 0.27 0.25 0.23 0.20 0.17 4.9	wmber o 2 3 0.565 5 0.511 8 0.476 6 0.442 6 0.412 9 0.386 0 0.344 7 0.309 2 0.256 0 7.33	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20	0.33 0.34 0.33 0.29 0.22 0.22 0.21 0.11 4.9	Nun 31 49 22 99 79 62 33 09 74	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20			
Size 5.5 6 6.5 7 7.5 8 9 10 12 Rate/Square  Type Size 5.5	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90 9	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420 12.20	Nur 1 0.374 0.343 0.317 0.294 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32 Em Co	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77 lumn Insertion 3	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20 s 4	0.37 0.34 0.31 0.29 0.27 0.25 0.23 0.20 0.17 4.9	wmber o 2 6 0.562 5 0.513 8 0.476 6 0.443 6 0.413 9 0.384 7 0.309 2 0.256 0 7.33  Em C  umber o 2 6 0.60	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7  olumn f Insertic 3 7 0.81	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20	0.34 0.34 0.35 0.29 0.22 0.22 0.21 0.11 4.5 9.6	Nun 31 49 22 99 62 33 09 74 90 E Nun	0.569 0.521 0.481 0.447 0.391 0.347 0.313 0.261 7.32 Em Col	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77 lumn Insertion 3	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20			
Size 5.5 6 6.5 7 7.5 8 9 10 12 Rate/Square  Type Size 5.5 6	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90 9 Nur 1 0.385 0.353	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn Insertion 3 0.767 0.703	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420 12.20 s 4 0.958 0.878	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398 0.365	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32 Em Co	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77 lumn Insertion 3 0.793 0.727	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20 s 4 0.990 0.908	0.37 0.34 0.31 0.29 0.27 0.25 0.23 0.20 0.17 4.9 9.5	wmber o 2 6 0.562 5 0.513 8 0.476 6 0.442 6 0.384 7 0.300 2 0.256 0 7.3  Em C  umber o 2 6 0.602	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7  olumn f Insertic 3 7 0.81 6 0.74	4 0 0.937 8 0.859 5 0.793 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20 0 0.93 1 0.93 1 0.93 0 0.937	1 0.33 0.33 0.29 0.22 0.22 0.21 0.11 4.9 9.6	Nun 31 49 22 99 79 62 333 09 74 90 E Nun 11	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32 Em Col	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77 lumn sertion 3 0.819 0.750	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20 s 4			
5.5 6 6.5 7 7.5 8 9 10 12 Rate/Square  Type Size 5.5 6 6.5	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90 9 Nur 1 0.385 0.353 0.326	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn Insertion 3 0.767 0.703 0.649	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420 12.20 8 4 0.958 0.878 0.811	Nur 1 0.374 0.343 0.317 0.294 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398 0.365 0.337	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32 Em Co	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77 lumn Insertion 3 0.793 0.727 0.671	4 0.932 0.854 0.732 0.683 0.641 0.569 0.512 0.427 12.20 s 4 0.990 0.908 0.838	0.37 0.34 0.31 0.29 0.27 0.25 0.23 0.20 0.17 4.9 9.5	wmber o 2 6 0.562 5 0.513 8 0.476 6 0.442 6 0.386 0 0.344 7 0.300 2 0.256 0 7.32  Em C  wmber o 2 6 0.602 2 0.556 4 0.514	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7  olumn f Insertic 3 7 0.81 6 0.74 4 0.68	4 0 0.937 8 0.859 5 0.793 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20 0 0.927 5 0.856	1 0.36 0.37 0.37 0.29 0.22 0.22 0.21 0.11 4.9 9.6	Nun 31 49 22 99 79 62 333 09 74 90 E Nun 111 76 47	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32 Em Col	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77 lumn sertion 3 0.819 0.750 0.693	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20 s 4 1.022 0.937 0.865			
Size	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90 9 Nur 1 0.385 0.353 0.326 0.302	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co mber of 2 0.575 0.527 0.486 0.452	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn Insertion 3 0.767 0.703 0.649 0.603	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.504 0.420 12.20 8 4 0.958 0.878 0.811 0.753	Nur 1 0.374 0.343 0.317 0.294 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398 0.365 0.337 0.312	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32 Em Co	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77 lumn Insertion 3 0.793 0.727 0.671 0.623	4 0.932 0.854 0.732 0.683 0.641 0.569 0.512 0.427 12.20 s 4 0.990 0.908 0.838 0.778	1 0.37 0.34 0.31 0.29 0.27 0.25 0.20 0.17 4.9 9.5 1 0.40 0.37 0.34 0.34	wmber o 2 6 0.562 5 0.513 8 0.476 6 0.442 6 0.386 0 0.344 7 0.300 2 0.256 0 7.32  Em C  wmber o 2 6 0.600 2 0.556 4 0.514 9 0.475	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7  olumn f Insertic 3 7 0.81 6 0.74 4 0.68 7 0.63	4 0 0.937 8 0.859 5 0.793 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20 200 1.011 3 0.927 5 0.856 6 0.795	9.6  9.6  0.34  0.35  0.22  0.22  0.22  0.21  4.3	Nun 31 49 22 99 62 33 09 74 90 E Nun 11 76 47 23	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32 Em Col hber of I 2 0.613 0.562 0.519 0.482	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77 lumn nsertion 3 0.819 0.750 0.693 0.643	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20 \$\frac{4}{2}\$ 1.022 0.937 0.865 0.803			
5.5 6 6.5 7 7.5 8 9 10 12  Rate/Square  Type Size 5.5 6 6.5 7 7.5	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90 9 Nur 1 0.385 0.353 0.326 0.302	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co mber of 2 0.575 0.527 0.486 0.452 0.422	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn Insertion 3 0.767 0.703 0.649 0.603 0.563	4 0.916 0.839 0.775 0.719 0.630 0.560 0.504 0.420 12.20 \$\frac{4}{0.958}\$ 0.878 0.811 0.753 0.703	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398 0.365 0.337 0.312 0.292	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32 Em Co nber of 2 0.594 0.545 0.503 0.467 0.436	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77 lumn Insertion 3 0.793 0.727 0.671 0.623 0.582	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20 \$\frac{4}{2}\$ 4 0.990 0.908 0.838 0.778 0.726	1 0.37 0.34 0.31 0.29 0.27 0.25 0.20 0.17 4.9 9.5 1 0.40 0.37 0.34 0.31 0.29	wmber o 2 3 0.562 5 0.513 8 0.476 6 0.442 6 0.412 9 0.386 0 0.344 7 0.3002 2 0.256 0 7.32  Em C  umber o 2 6 0.600 2 0.556 4 0.514 9 0.477 3 0.444	f Insertic  3  2 0.75  5 0.68  6 0.63  2 0.59  2 0.55  6 0.51  4 0.45  9 0.41  3 0.34  2 9.7  olumn  f Insertic  3  7 0.81  6 0.74  4 0.68  7 0.63  5 0.59	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20 0 1.011 3 0.927 5 0.856 6 0.795 4 0.742	1 0.36 0.37 0.37 0.29 0.22 0.22 0.21 0.21 0.21 0.21 0.21 0.21	Num 31 49 22 99 79 62 33 09 74 90 E Num 11 76 47 23 01	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32 Em Col hber of I 2 0.613 0.562 0.519 0.482 0.450	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77 lumn nsertion 3 0.819 0.750 0.693 0.643 0.600	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20 \$\frac{3}{2}\$ 4 1.022 0.937 0.865 0.803 0.750			
Size 5.5 6 6.5 7 7.5 8 9 10 12  Rate/Square  Type Size 5.5 6 6.5 7 7.5 8	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90 9 Nur 1 0.385 0.353 0.326 0.302 0.282 0.265	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co mber of 2 0.575 0.527 0.486 0.452 0.422 0.395	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn Insertion 3 0.767 0.703 0.649 0.603 0.563 0.528	4 0.916 0.839 0.775 0.719 0.630 0.560 0.504 0.420 12.20 \$\frac{1}{2}\$\$\$ 4 0.958 0.878 0.811 0.753 0.703 0.659	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398 0.365 0.337 0.312 0.292 0.273	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32 Em Co nber of 2 0.594 0.545 0.503 0.467 0.436 0.408	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77 lumn Insertion 3 0.793 0.727 0.671 0.623 0.582 0.545	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20 \$\frac{4}{2}\$ 0.990 0.908 0.838 0.778 0.726 0.681	1 0.37 0.34 0.31 0.29 0.27 0.25 0.20 0.17 4.9 9.5 1 0.40 0.37 0.34 0.31 0.29 0.27	wmber o 2 3 0.562 5 0.513 8 0.476 6 0.442 6 0.412 9 0.386 0 0.344 7 0.3002 2 0.256 0 7.32  Em C  umber o 2 6 0.600 2 0.556 4 0.514 9 0.477 3 0.443 9 0.441	f Insertic  3  2 0.75  5 0.68  6 0.63  2 0.59  2 0.55  6 0.51  4 0.45  9 0.41  3 0.34  2 9.7  Olumn  f Insertic  3  7 0.81  6 0.74  4 0.68  7 0.63  5 0.59  7 0.55	4 0 0.937 8 0.859 5 0.793 0 0.736 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20 0 1.011 3 0.927 5 0.856 6 0.795 4 0.742 7 0.695	9.6  9.6  0.34  0.37  0.29  0.22  0.22  0.21  4.3  9.6  1  0.4  0.33  0.34  0.35  0.36  0.36	Num 31 49 22 99 79 62 33 74 90 E Num 11 76 47 23 71 32	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32 Em Col hber of I 2 0.613 0.562 0.519 0.482 0.450 0.422	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77 lumn nsertion 3 0.819 0.750 0.693 0.643 0.600 0.563	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20 \$\frac{3}{2}\$ 4 1.022 0.937 0.865 0.803 0.750 0.703			
Size 5.5 6 6.5 7 7.5 8 9 10 12  Rate/Square  Type Size 5.5 6 6.5 7 7.5 8 9	Nur 1  0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90  9  Nur 1  0.385 0.353 0.326 0.302 0.282 0.265 0.235	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co mber of 2 0.575 0.527 0.486 0.452 0.452 0.422 0.395	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn Insertion 3 0.767 0.703 0.649 0.603 0.563 0.528 0.469	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.420 12.20 8 4 0.958 0.878 0.811 0.753 0.703 0.659 0.586	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398 0.365 0.337 0.312 0.292 0.273 0.243	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32 Em Co nber of 2 0.594 0.545 0.503 0.467 0.436 0.408 0.363	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77 lumn Insertion 3 0.793 0.727 0.671 0.623 0.582 0.545 0.485	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20 8 4 0.990 0.908 0.838 0.778 0.726 0.681 0.605	1 0.37 0.34 0.31 0.29 0.27 0.25 0.20 0.17 4.9 9.5 1 0.40 0.37 0.34 0.31 0.29 0.27	umber o 2 3 0.562 5 0.513 8 0.476 6 0.442 6 0.412 9 0.386 0 0.344 7 0.309 2 0.256 0 7.33  Em C  umber o 2 3 0.600 2 0.556 4 0.514 9 0.477 8 0.444 9 0.413 3 0.37	f Insertic  3  2 0.75  5 0.68  6 0.63  2 0.59  2 0.55  6 0.51  4 0.45  9 0.41  3 0.34  2 9.7  Olumn  f Insertic  3  7 0.81  6 0.74  4 0.68  7 0.63  5 0.59  7 0.55  1 0.49	4 0 0.937 8 0.859 5 0.793 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20  0 1.011 3 0.927 5 0.856 6 0.795 4 0.742 7 0.695 5 0.618	9.6  9.6  0.34  0.37  0.29  0.22  0.22  0.21  4.9  1  0.4  0.33  0.34  0.35  0.36  0.36  0.36  0.37  0.36	Num 31 49 22 99 79 32 33 30 74 90 E Num 11 76 47 23 51	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32 Em Col mber of I 2 0.613 0.562 0.519 0.482 0.450 0.422 0.375	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77 lumn nsertion 3 0.819 0.750 0.693 0.643 0.600 0.563 0.500	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20 8 4 1.022 0.937 0.865 0.803 0.750 0.703 0.625			
Size 5.5 6 6.5 7 7.5 8 9 10 12  Rate/Square  Type Size 5.5 6 6.5 7 7.5 8	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90 9 Nur 1 0.385 0.353 0.326 0.302 0.282 0.265	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co mber of 2 0.575 0.527 0.486 0.452 0.422 0.395	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn lnsertion 3 0.767 0.703 0.649 0.603 0.563 0.528 0.469 0.422	4 0.916 0.839 0.775 0.719 0.630 0.560 0.504 0.420 12.20 \$\frac{1}{2}\$\$\$ 4 0.958 0.878 0.811 0.753 0.703 0.659	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398 0.365 0.337 0.312 0.292 0.273 0.243 0.219	nber of 2  0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256  7.32  Em Co nber of 2  0.594 0.545 0.503 0.467 0.436 0.408 0.363 0.327	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77  lumn Insertion 3 0.793 0.727 0.671 0.623 0.582 0.545 0.485 0.436	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20 \$\frac{4}{2}\$ 0.990 0.908 0.838 0.778 0.726 0.681	1 0.37 0.34 0.31 0.29 0.27 0.25 0.20 0.17 4.9 9.5 1 0.40 0.37 0.34 0.31 0.29 0.27	umber o  2  3 0.562  5 0.513  8 0.476  6 0.442  6 0.412  9 0.386  0 0.344  7 0.309  2 0.256  0 7.33  Em C  umber o  2  3 0.600  2 0.556  4 0.514  9 0.477  8 0.448  9 0.413  3 0.373  3 0.334	f Insertic  3  2 0.75  5 0.68  6 0.63  2 0.59  2 0.55  6 0.51  4 0.45  9 0.41  3 0.34  2 9.7  Olumn  f Insertic  3  7 0.81  6 0.74  4 0.68  7 0.63  5 0.59  7 0.55  1 0.49  4 0.44	4 0 0.937 8 0.859 5 0.793 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20  DDS 4 0 1.011 3 0.927 5 0.856 6 0.795 4 0.742 7 0.695 5 0.618 6 0.556	9.6  9.6  0.34  0.37  0.29  0.22  0.22  0.21  4.3  9.6  1  0.4  0.33  0.34  0.35  0.36  0.36	Num 31 49 22 99 79 32 33 09 74 90  E Num 11 76 47 23 01 38 21 51	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32 Em Col hber of I 2 0.613 0.562 0.519 0.482 0.450 0.422 0.375 0.337	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77    umn   nsertion 3 0.819 0.750 0.693 0.643 0.600 0.563 0.500 0.450	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20 \$\frac{4}{2}\$ 1.022 0.937 0.865 0.803 0.750 0.703 0.625 0.562			
Size 5.5 6 6.5 7 7.5 8 9 10 12  Rate/Square  Type Size 5.5 6 6.5 7 7.5 8 9 10	Nur 1 0.368 0.337 0.311 0.289 0.270 0.253 0.225 0.202 0.169 4.90  9 Nur 1 0.385 0.353 0.326 0.302 0.282 0.265 0.2035 0.212	0.549 0.504 0.465 0.432 0.403 0.378 0.336 0.302 0.252 7.32 Em Co mber of 2 0.575 0.527 0.486 0.452 0.452 0.422 0.395 0.351	0.733 0.672 0.620 0.576 0.538 0.504 0.448 0.403 0.336 9.77 lumn lnsertion 3 0.767 0.703 0.649 0.603 0.563 0.528 0.469 0.422 0.352	4 0.916 0.839 0.775 0.719 0.671 0.630 0.560 0.420 12.20 8 4 0.958 0.878 0.811 0.753 0.703 0.659 0.586 0.527	Nur 1 0.374 0.343 0.317 0.294 0.274 0.257 0.229 0.206 0.172 4.90  9.3  Nur 1 0.398 0.365 0.337 0.312 0.292 0.273 0.243	0.559 0.512 0.473 0.439 0.410 0.384 0.342 0.307 0.256 7.32 Em Co nber of 2 0.594 0.545 0.503 0.467 0.436 0.408 0.363	0.746 0.684 0.631 0.586 0.547 0.513 0.456 0.410 0.342 9.77 lumn Insertion 3 0.793 0.727 0.671 0.623 0.582 0.545 0.485	4 0.932 0.854 0.788 0.732 0.683 0.641 0.569 0.512 0.427 12.20 8 4 0.990 0.908 0.838 0.778 0.726 0.681 0.605 0.545 0.454	9.5 1 0.37 0.34 0.31 0.29 0.27 0.25 0.23 0.20 0.17 4.9 9.5 1 0.40 0.37 0.34 0.31 0.29 0.27 0.24 0.22	wmber o 2 6 0.562 5 0.513 8 0.476 6 0.443 6 0.344 7 0.309 2 0.256 0 7.32  Em C  umber o 2 6 0.600 2 0.551 4 0.514 9 0.47 8 0.444 9 0.41 8 0.37 3 0.334 6 0.276	f Insertic 3 2 0.75 5 0.68 6 0.63 2 0.59 2 0.55 6 0.51 4 0.45 9 0.41 3 0.34 2 9.7 Olumn f Insertic 3 7 0.81 6 0.63 7 0.63 5 0.59 7 0.55 1 0.49 4 0.44 3 0.37	4 0 0.937 8 0.859 5 0.793 0 0.687 6 0.644 9 0.573 3 0.515 4 0.429 7 12.20  DDS 4 0 1.011 3 0.927 5 0.856 6 0.795 4 0.742 7 0.695 5 0.618 6 0.556	9.6  1  0.3i 0.3i 0.3i 0.2i 0.2i 0.2i 0.2i 0.2i 0.3i 0.3i 0.3i 0.3i 0.3i 0.3i 0.3i 0.3	Num 31 49 22 33 30 74 90 E Num 11 76 47 23 51 26 38	0.569 0.521 0.481 0.447 0.417 0.391 0.347 0.313 0.261 7.32 Em Col mber of I 2 0.613 0.562 0.519 0.482 0.450 0.422 0.375	0.759 0.696 0.642 0.596 0.556 0.522 0.464 0.417 0.348 9.77    umn   nsertion 3 0.819 0.750 0.693 0.603 0.503 0.500 0.450 0.375	4 0.948 0.869 0.802 0.745 0.695 0.651 0.579 0.521 0.434 12.20 8 4 1.022 0.937 0.865 0.803 0.750 0.703 0.625			

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9.9 Em Column					10	10 Em Column				Em Co	lumn		11	11 Em Column				
Туре			Insertion			mber of					Insertion			Number of				
Size _	1	2	3	4	1	2	3	4	1	2	3	4	1_	2	3	4		
5.5	0.423	0.632		1.054	0.428	0.639	0.853	1.065	0.449	0.671	0.895	1.118	0.47			1.171		
6 6.5	0.388 0.358	0.580 0.535	0.774 0.714	0.966 0.892	0.392 0.362	0.586 0.541	0.782 0.721	0.976 0.901	0.412 0.380	0.615 0.568	0.821 0.758	1.025 0.946	0.43 0.39			1.074 0.991		
7	0.333	0.497	0.663	0.828	0.336	0.502	0.670	0.837	0.353	0.527	0.703	0.878	0.37			0.920		
7.5	0.310	0.464	0.619	0.773	0.314	0.468	0.625	0.781	0.329	0.492	0.657	0.820	0.34			0.859		
8	0.291	0.435	0.580	0.725	0.294	0.439	0.586	0.732	0.309	0.461	0.616	0.769	0.32			0.805		
9	0.259	0.386	0.516	0.644	0.261	0.390	0.521	0.651	0.274	0.410	0.547	0.683	0.28			0.716		
10 12	0.233 0.194	0.348	0.464 0.387	0.580 0.483	0.235 0.196	0.351 0.293	0.469 0.391	0.586 0.488	0.247 0.206	0.369	0.492 0.410	0.615 0.512	0.25 0.21			0.644 0.537		
12	0.194	0.290	0.307	0.463	0.196	0.293	0.391	0.400	0.206	0.307	0.410	0.512	0.21	0 0.322	0.430	0.557		
Rate/Square	4.90	7.32	9.77	12.20	4.90	7.32	9.77	12.20	4.90	7.32	9.77	12.20	4.9	0 7.32	9.77	12.20		
11.25 Em Column					11.5	Em Co	lumn		12	Em Co	lumn		12.2	12.2 Em Column				
Туре			Insertior			mber of					Insertion			Number of Insertions				
Size	1	2	3	4	1	2	3	4	1	2	3	4	1_	2	3	4		
5.5	0.481	0.719	0.959	1.198	0.492	0.735	0.981	1.224	0.513	0.767	1.023	1.278	0.52	2 0.779	1.040	1.299		
6	0.441	0.659	0.879	1.098	0.451	0.673	0.899	1.122	0.470	0.703	0.938	1.171	0.47			1.191		
6.5	0.407	0.608	0.812	1.014	0.416	0.622	0.830	1.036	0.434	0.649	0.866	1.081	0.44			1.099		
7 7.5	0.378 0.353	0.565 0.527	0.754 0.703	0.941 0.878	0.386 0.361	0.577 0.539	0.770 0.719	0.962 0.898	0.403 0.376	0.602 0.562	0.804 0.750	1.004 0.937	0.41 0.38			1.021 0.953		
7.5 8	0.353	0.527	0.703	0.878	0.361	0.539	0.719	0.898	0.376	0.562	0.750	0.937	0.38			0.953		
9	0.294	0.439	0.586	0.732	0.301	0.449	0.599	0.748	0.314	0.468	0.625	0.781	0.31			0.794		
10	0.265	0.395	0.528	0.659	0.270	0.404	0.539	0.673	0.282	0.422	0.563	0.703	0.28			0.714		
12	0.221	0.329	0.440	0.549	0.225	0.337	0.449	0.561	0.235	0.351	0.469	0.586	0.23	9 0.357	0.477	0.595		
Rate/Square	4.90	7.32	9.77	12.20	4.90	7.32	9.77	12.20	4.90	7.32	9.77	12.20	4.9	0 7.32	9.77	12.20		
	12.4	Em Co	dumn		12.41	Em Co	lumn		12.5	Em Co	dumn		13	Em C	olumn			
Туре			Insertior	ne.		mber of		16			Insertion	ne.		13 Em Column  Number of Insertions				
Size _	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
5.5	0.530	0.792	1.057	1.320	0.531	0.793	1.058	1.321	0.535	0.799	1.066	1.331	0.55	6 0.830	1.108	1.384		
6	0.486	0.726	0.969	1.210	0.486	0.727	0.970	1.211	0.490	0.732	0.977	1.220	0.51	0 0.761	1.016	1.269		
6.5	0.449	0.670	0.895	1.117	0.449	0.671	0.895	1.118	0.452	0.676	0.902	1.126	0.47			1.171		
7	0.417	0.622	0.831	1.037	0.417	0.623	0.831	1.038	0.420	0.627	0.837	1.046	0.43			1.088		
7.5 8	0.389	0.581	0.775	0.968	0.389	0.581	0.776	0.969	0.392	0.586	0.782	0.976	0.40			1.015		
9	0.365 0.324	0.545 0.484	0.727 0.646	0.908 0.807	0.365 0.324	0.545 0.484	0.727 0.647	0.908 0.807	0.368 0.327	0.549 0.488	0.733 0.651	0.915 0.813	0.38 0.34			0.952 0.846		
10	0.292	0.436	0.582	0.726	0.324	0.436	0.582	0.727	0.327	0.439	0.586	0.732	0.30			0.761		
12	0.243	0.363	0.485	0.605	0.243	0.363	0.485	0.606	0.245	0.366	0.489	0.610	0.25			0.634		
Rate/Square	4.90	7.32	9.77	12.20	4.90	7.32	9.77	12.20	4.90	7.32	9.77	12.20	4.9	0 7.32	9.77	12.20		
13.5 Em Column  Type Number of Insertions						Em Co			14.5		Insertior			15 Em Column  Number of Insertions				
Type Size	1	2	3	4	1	mber of 2	3	4	1	2	3	4	1	2	3	4		
5.5	0.577	0.862	1.151	1.437	0.599	0.894	1.194	1.491	0.620	0.926	1.236	1.544	0.64	1 0.958	1.279	1.597		
6	0.529	0.791		1.318	0.549	0.820	1.094	1.366	0.568	0.849	1.133	1.415	0.58			1.464		
6.5	0.488	0.730	0.974	1.216	0.507	0.757	1.010	1.261	0.525	0.784	1.046	1.306	0.54			1.351		
7_	0.454		0.904	1.129	0.470	0.703	0.938	1.171	0.487	0.728	0.971	1.213	0.50			1.255		
7.5	0.423	0.632		1.054	0.439	0.656	0.875	1.093	0.455	0.679	0.907	1.132	0.47			1.171		
8	0.397		0.791	0.988	0.412	0.615	0.821	1.025	0.426	0.637	0.850	1.061	0.44			1.098		
9 10	0.353	0.527		0.878	0.366	0.547	0.729	0.911	0.379	0.566	0.756	0.943	0.39			0.976		
12	0.318 0.265	0.474 0.395		0.791 0.659	0.329 0.274	0.492 0.410	0.547	0.820 0.683	0.341 0.284	0.509 0.425	0.680 0.567	0.849 0.708	0.35 0.29		0.703 0.586	0.878 0.732		
Rate/Square	4.90	7.32	9.77	12.20	4.90	7.32	9.77	12.20	4.90	7.32	9.77	12.20	4.9	0 7.32	9.77	12.20		
	16.5	Em Co	lumn		17	Em Co	lumn		18	Em Co	lumn		20	20 Em Column				
Туре	Number of Insertions					mber of		is			Insertior	ns.		Number of Insertions				
Size	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
5.5	0.706	1.054		1.757	0.727	1.086	1.450	1.810	0.770	1.150	1.535	1.917	0.85			2.129		
6	0.647	0.966	1.290	1.610	0.666	0.996	1.329	1.659	0.706	1.054	1.407	1.757	0.78			1.952		
6.5	0.597	0.892		1.487	0.615	0.919	1.227	1.532	0.651	0.973	1.299	1.622	0.72			1.802		
7 7.5	0.554	0.828	1.105	1.380	0.571	0.853	1.139	1.422	0.605	0.903	1.206	1.506	0.67			1.673		
7.5 8	0.517 0.485	0.773 0.725	1.032 0.967	1.288 1.208	0.533 0.500	0.796 0.747	1.063 0.997	1.327 1.244	0.564 0.529	0.843 0.791	1.126 1.055	1.405 1.318	0.62 0.58			1.562 1.464		
9	0.431	0.725		1.206	0.500	0.747	0.886	1.106	0.529			1.171	0.52			1.301		
10	0.388	0.580	0.774	0.966	0.400	0.597	0.797	0.996	0.470			1.054	0.32			1.171		
12	0.323	0.483		0.805	0.333	0.498	0.664	0.830	0.353		0.703	0.878	0.39			0.976		
Rate/Square	4.90	7.32	9.77	12.20	4.90	7.32	9 77	12.20	4.90	7.32	9 77	12.20	4.9	0 7.32	9 77	12.20		
raic/Square	4.90	1.32	5.11	12.20	4.90	1.32	5.11	12.20	4.90	1.32	5.11	12.20	4.8	υ 1.3 <u>2</u>	5.11	12.20		